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ABSTRACT

The document consists of a set of performance tests developed to assist the typewriting teacher in determining the achievement level of students. Tests for four different levels of achievement are included, with minimum performance standards specified for each level. For all four levels a test is included for timed typing, letter typing, and tabulation. There is a test for manuscript typing for levels two through four, and level four includes a test for typing numbers in context. Alternate forms of each level of test are included to provide for pretests and posttests. Development of the tests involved two testing programs with approximately 2,000 students in over 40 secondary schools and colleges. Data are also provided on the statistical treatment of the tests. Data indicating student scores on the various exercises will enable the teacher to compare the performance of students on a statewide basis. Standards for scoring timed writings, letters, tables, and manuscripts are also provided. (Author/NJ)

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PERFORMANCE TESTS FOR TYPEWRITING AND V O E TEACHERS FOR MEASURING VARIOUS ACHIEVEMENT LEVELS

By

Ivey Chance
and
Jerry Whitt

Monograph Series: Number 9
Business And Economic Research Center
Middle Tennessee State University
Murfreesboro, Tennessee
December, 1975

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FOREWORD

Service to the academic community, as well as to the business and industrial clientele of the University, is a most important function of our School of Business. This volume represents such a valuable service to the many Typewriting and Vocational Office Education teachers and students in the State of Tennessee and elsewhere.

Dr. Ivey Chance (Assistant Professor of Business Education) and Dr. Jerry Whitt (Professor of Accounting and Information Systems) have combined their talents to produce this interesting volume, PERFORMANCE TESTS FOR TYPEWRITING AND VOE TEACHERS FOR MEASURING VARIOUS ACHIEVEMENT LEVELS. It is designed to be of assistance to teachers and students both on the secondary and the collegiate scenes. The tests contained herein have been designed and developed to aid the teacher in the determination of the real achievement level of students in typewriting. It is hoped that the volume will be extremely helpful as the students show continued progress in typewriting from Level 1 through Level 4.

Business Education in all of its facets is an integral part of the total educational procedure of the School of Business, which prepares the student along many lines for the acceptance of worthwhile positions in business firms throughout the country. The Business and Economic Research Center is proud to have the opportunity to present this Monograph #9 to the academic community, because Typewriting and Vocational Office Education teachers and students are engaged in a process designed to enhance the real output and the viability of business establishments everywhere.

Comments and suggestions about this volume are welcomed by Dr. Chance and Dr. Whitt and should be communicated to them in the School of Business at Middle Tennessee State University, Murfreesboro, Tennessee 37132.

.....PAUL T. HENDERSHOT, Director
Business and Economic Research Center

December, 1975

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I

INTRODUCTION

Enclosed in this publication is a set of tests that have been developed to assist the typewriting teacher in determining the achievement level of typewriting students. The standards by which these tests were developed can be found in a state curriculum guide for Tennessee Vocational Office Education teachers (5). The levels of minimum typewriting performance, as described in the Curriculum Guide are repeated on the page preceding each set of tests, should you not have available a copy of the Curriculum Guide. These standards represent minimum performance standards for job entry to various task categories described in the Curriculum Guide.

Development of the tests involved two testing programs with approximately 2,000 students in over 40 secondary schools and colleges. These tests are as follows:

Level 1: (1) Timed Writing (2) Letter (3) Tabulation

Level 2: (1) Timed Writing (2) Letter (3) Tabulation (4) Manuscript

Level 3: (1) Timed Writing (2) Letter (3) Tabulation (4) Manuscript

Level 4: (1) Timed Writing (2) Letter (3) Tabulation (4) Manuscript (5) Typing Numbers in Context

Alternate forms of each level of tests were developed in order that pretests and postests could be provided or that second testing of an individual for any reason would be available.

Data are also provided in this booklet on the statistical treatment of the tests. Of particular interest are the data showing the scores made by students in the various exercises, which will enable the teacher to compare the performance of students on a state-wide basis. The standards used for scoring timed writings, letters, tables, and manuscripts are also provided.

MINIMUM PERFORMANCE STANDARDS FOR LEVEL I

Timed Writings

Type straight printed copy of reasonable difficulty for 3 minutes at a speed of 25 words per minute with no more than 3 errors.

Letters

Arrange and type common letter styles.

Tabulation

Arrange and type common tabulated reports.

Manuscripts--Reports

Not tested at this level.

This man was born in Boston in 1809. The parents were both of the stage; they toured all the states. When he was only a few years old, his folks died. A friend by the name of John Allen took him in and raised him well. He was sent to the best schools in the land. What was his name? His name was Poe. 13 28 43 57 60

As a writer of short stories Poe had no equal in the land. He is said to have been the first one to write what we know now as the detective story. It was pure art the way he worked up the plots and the way he wrote in such a clear way the scenes of gloom, horror, and terror. 73 88 103 115

Poe had a very sad life and he died at the young age of forty. While at one school Poe took up the bad habits of drink and gambling. His debts were so great that the man who had raised him could not help him pay them off. In fact, he said he would not ever help Poe again. The story of Poe's life for the next twenty years is one of the saddest of any great man in our past. For all these years he lived a very poor life with just a few rays of light here and there. 129 144 158 173 188 203 207

To Poe, poems were music, and there was no poem that was not song. Even the folk who heard him recite his works said his voice was like a song. The poem most loved by those who came to hear him was the poem about the raven. 221 236 250 251

Some may not know it but Poe was married. His wife died two years before he did. His own death came from drinking too much. Some believe that Poe could not or may not have been able to write such poems had not he lived the sad life that he lived. 265 280 294 300

Level 1--Letters

Directions: Type the following personal letter, using any acceptable letter style with appropriate punctuation. (10 minutes)

(1) 60-space line margin

(2) Space down 13 times from top of page to begin typing the return address and date

(3) Space down 8 times from date to salutation

(4) Single space body of letter

(5) Space down twice after each paragraph

(6) Space down twice from body to complimentary close

1917 Radcliff Drive
Knoxville, TN 37912
(Current Date)

Dear Betty, The party at your house on Saturday night was a real success. We certainly had a wonderful time. (Paragraph) When we returned home, we found the front door wide open and our dog Toby was outside having a fine time. So, it looks like Saturday night turned out fine for all. (Paragraph) We just wanted you to know how much we enjoyed your dinner and all the good fellowship that came with it. You must let us take our turn by having everyone over here soon--maybe in October, for a Halloween Party. Make a note on your calendar. Sincerely,

Level 1--Tabulation

Directions: (1) Center horizontally the longest line in body

(2) Center vertically on full sheet of paper

(3) Hand in when completed--you are through

(4) (10 minutes)

TENNESSEE CITIES

Dayton

Lake City

Bristol

Sparta

Franklin

Columbia

Jackson

Milton

Martin

Woodbury

Level 1--Timed Writing (Alternate Item)

In an old square house that was made out of wood and sat on the edge 14
of the sea was born one of the most famous of all our American writers. 28
The name of the state in which he was born was Maine. He was born two years 43
before one other great man of the land, by the name of Poe. What was the 57
name of this great man? His name was Longfellow. 67

His life from the very start moved on straight lines. He came from a 81
family that lived in a good home and one in which there never had to be 95
concern from where the next meal would come. This poet went to school with 110
other boys who at a young age were thinking more of verse making than of all 125
the things that boys should love to do at such an age. 136

After school, he travelled over the seas to see the many things and 150
places he would write about the rest of his life. He came back to school as 165
a teacher and taught for more than twenty years. He quit at a young age to 180
spend the rest of his life writing and to visit with his many friends. 194

He was twice married. His first wife died while they were on a trip 208
overseas to study. He was married to his next wife for 19 years. In fact, 223
she was put to rest on the day that would have marked their nineteenth year. 238
He was so saddened by her death that for years he could not write--and no 252
one could dare speak of his wife. 259

This man was one of the greats of all our writers. He took what he saw 273
or heard or read and wrote his own works. He wrote out of what he learned 288
from others. 290

Level 1--Letters (Alternate Item)

Directions: Type the following personal letter, using any acceptable letter style with appropriate punctuation. (10 minutes)

(1) 60-space line margin

(2) Space down 13 times from top of page to begin typing the return address and date

(3) Space down 8 times from date to salutation

(4) Single space body of letter

(5) Space down twice after each paragraph

(6) Space down twice from body to complimentary close

1917 Wade Boulevard
Nashville, Tennessee 37258
(Current Date)

Dear Kathy, We certainly enjoyed having you and Richard over for dinner the other night. (Paragraph) Our new neighbors had a wonderful time, and it seemed everyone else did, too. The children really had a great time playing with our cat, didn't they? It was hard to tell who had the most fun; the cat has been sleeping all day today. (Paragraph) Marilyn and I are planning to go to the lake in two weeks. Maybe you two would like to come along. Think about it and call us a few days in advance if you can come along with us.

Level 1--Tabulation (Alternate Item)

Directions: (1) Center horizontally the longest line in body

(2) Center vertically on full sheet of paper

(3) Hand in when completed--you are through

(4) (10 minutes)

GEORGIA TOWNS

Glenmore

Sardis

Waycross

Augusta

Statesboro

Millen

Valdosta

Douglas

Tifton

Albany

MINIMUM PERFORMANCE STANDARDS FOR LEVEL II

Timed Writings

Type straight printed copy of reasonable difficulty for 5 minutes at a speed of 40 words per minute with no more than 3 errors.

Letters

Produce a mailable letter of average length (no special lines), with one carbon copy and an addressed envelope in no more than 10 minutes.

Tabulation

Arrange and type common tabulated reports.

Manuscripts--Reports

Produce corrected or error free manuscript copy of 200 words from plain typewritten copy in no more than 10 minutes.

Level 2--Timed Writing

The school house: The school house stood near the center of the 13
district, at the forks of four roads, so near the usual track of wagons that 28
a large stone was set up at the end of the house to keep it from injury. 43
Except in the dry season the ground was wet, and the soil by no means firm. 58
The spot was purposely exposed to the bleak winds of winter; nor were there 73
any shade trees to keep the children from the hot rays of the summer's sun, 88
as they were cut down many years ago. Neither was there any such thing as 102
an outhouse of any kind, not even a wood shed. 112

The size of the house was 22 by 20 feet. From the floor to the top it 126
was seven feet tall. The chimney and front door took up about four feet at 141
one end, leaving the room itself 18 by 20 feet. Around the sides of the room 156
were big desks, placed so that when the pupils were sitting at them their 171
faces were to the teacher and their backs to the wall. Placed to the sides 186
of the desks near the teacher were stools for the small ones. The teacher's 201
desk and chair took up the center. On this desk were placed a rod, or 215
ferule; sometimes both. These, with books, writings, inkstands, rulers 229
and plummets, with a fire shovel, and a pair of tongs (often broken), were 244
the main furniture. 248

The room was warmed by a large and deep fire place. So large was it, 262
and so good in warming the room otherwise, that there had been seen about 275
one-eighth of a cord of good wood burning in it at a time. In bad weather 292
it was estimated that the amount usually used was not far from a cord a week. 307

Level 2--Letters

Directions: Type the following letter, making one carbon and addressing an envelope. You may use any acceptable letter style, with appropriate punctuation style. Assume that (1) you are using letterhead paper and (2) the envelope has the return address preprinted so that only the address need be typed. (10 minutes)

(Current Date) International Travel Agency, 3413 Oakdale Avenue, Memphis, TN 37423 Gentlemen My wife and I are planning a vacation in Europe beginning August 1. Would you provide us with travel costs and other information for such a trip? (P) We would like to visit Ireland (3 days), Germany (4 days), England (1 week), France (2 weeks). This schedule gives us one month abroad though my vacation period is six weeks long. You may, therefore, use up to one additional week for travel between points. (P) We would like to plan part of the trip to be taken by automobile; therefore, would you also figure the rental of a small car, such as the Volkeswagen? (P) May we hear from you soon? Yours truly J. Fred Harper, President (Your Initials)

Level 2--Tabulation

Directions: Center horizontally and vertically on a full sheet of paper the following problem. Erase and correct all typing errors. Use double spacing. Leave 10 spaces between columns. Hand in when completed. (10 minutes)

CITIES TO VISIT IN TENNESSEE

(by Month)

Bristol	January
Knoxville	February
Maryville	August
Cleveland	October
Nashville	December
Sparta	November
Winchester	February
Columbia	August
Jackson	September
Memphis	October

Level 2--Manuscript

Directions: (1) Type the following article in manuscript form, using a 60-space line (Pica) or a 70-space line (Elite)

(2) Leave a top margin of 1 1/2" on first page; 1" on other pages

(3) Leave a bottom margin of 1"

(4) (10 minutes)

THE HARVEST

A person who should take a knife and begin to slash his flesh until the blood began to run from it would be shut up in an insane asylum; but we are all the time cutting our mental selves with the edged thought-tools--hatred, revenge, anger--and yet we think we are sane and normal. Every thought is a seed from which grows a mental plant and the same as itself. If there is a venom in the seed thought-plant, there will be venom in the fruit which will poison the life, which will stop our happiness and success. If you sell yourself to your desires, you must expect the harvest to be the same. A man who sells himself to a selfish life, a life of taking and never giving, must not complain if there are thistles and thorns in his harvest. (P) Life is just to us. It gives us what we pay for. The truth is, many of us ask for things and we are not willing to pay the price, and, of course, we receive only as we pay, for Nature keeps a cash store. She gives us all we pay for; we cannot take away a thing if we do not pay the price.

Level 2--Timed Writing (Alternate Item)

The windows were five in all, of twelve panes each. They were placed 14
so low in the walls as to give full chance to the pupils to see each 27
traveller as he passed--and to be seen. The floor and ceiling were level, 42
and the walls were dobbed. 48

The school was seldom closed for a day or two; however, the teacher 61
and pupils were sometimes compelled to cut or saw wood to stop the closing 76
of the school. The wood was left in the road near the house, so that it 90
often was buried in the snow, or wet with rain. The fires were to be 104
started about half an hour before the time of starting the school. When 118
someone failed to build a fire, it would be very cold all the way to noon. 133
On the other hand, sometimes the warmth of a big fire made it just as bad. 148
Sometimes too, pupils were annoyed by smoke. 157

The winter school opened about the first week of December, and continued 172
for 12 to 16 weeks. The summer term started about the first of May. The 187
length of summer terms was three or four months. Later the time was 201
stretched to 20 weeks. 205

The teacher: Good moral character, and a master of the main subjects 220
was required. Most of them, both males and females, were from sixteen to 235
eighteen years of age, and a few, over twenty-one. 245

Until within a few years, no studies have been allowed in the day 258
school but spelling, reading, and writing. Math was taught by a few 272
teachers, one or two times in a week, but, in spite of the most determined 287
opposition, math is now allowed in the day school. 297

Level 2--Letters (Alternate Item)

Directions: Type the following letter, making one carbon and addressing an envelope. You may use any acceptable letter style, with appropriate punctuation style. Assume that (1) you are using letterhead paper and (2) the envelope has the return preprinted so that only the address need be typed. (10 minutes)

(Current Date) Mr. J. Fred Harper, 2413 Elm Street, Memphis, TN 37336
Dear Mr. Harper Thank you for giving International the duty to plan your trip abroad. We have arranged the trip in such a way that you will have more than a week to rest at home before returning to your work. (P) The plan enclosed gives you full details of the trip: August 3-5, Ireland; August 6-13, England; August 15-18, Germany; August 20-September 2, France; September 3, home. The days skipped are set aside for travel. (P) Because this is your first trip over, we wanted your trip by car to be easy. The big car shown in the schedule is yours at no extra cost. (P) May you have a good trip.
Sincerely yours Hal E. Robins, Travel Agent (your initials)

Level 2--Tabulation (Alternate Item)

Directions: Center horizontally and vertically on a full sheet of paper the following problem. Erase and correct all typing errors. Use double spacing. Leave 10 spaces between columns. Hand in when completed. (10 minutes)

TOWNS TO VISIT IN GEORGIA

(by Month)

Augusta	November
Thompson	December
Washington	February
Atlanta	November
Toccoa	February
Clayton	October
Dalton	October
Savannah	August
Waycross	January
Lakeland	September

Level 2--Manuscript (Alternate Item)

Directions: (1) Type the following article in manuscript form, using a 60-space line (Pica) or a 70-space line (Elite)

(2) Leave a top margin of 1 and 1/2" on first page; 1" on other pages

(3) Leave a bottom margin of 1"

(4) (10 minutes)

THE BEST IS NEVER TOO GOOD

If all I have said be true, and I can see no flaw in it, then the prizes which are to be won on the machine, or, to put it another way, the dollars which are to be had from its use, must come from the speed of the operator and from little else. As a rule that is so and the salary will depend on the quantity of work turned out in a given time. (P) There is nothing that can be bought or sold that is not measured by the inch, the quart or the pound. If your neighbor does twice as much work as you do every day then he will get twice as many dollars for doing it. And when it comes to quality--well, fresh eggs and cold storage eggs vary in price, it is true, but at the outset you should make up your mind to eschew the cold storage stuff and sell nothing in the way of labor that is not first-class. The best is never too good, so if you are wise you will make out your price list on the basis that as you furnish the best goods you are entitled to the best price, the amount being strictly in accord with the quantity.

MINIMUM PERFORMANCE STANDARDS FOR LEVEL III

Timed Writings

Type straight printed or handwritten copy of moderate difficulty for 5 minutes at a speed of 40 words per minute with no more than 3 errors.

Letters

Produce a mailable business letter of average length (no special lines), with one carbon copy and an addressed envelope from handwritten copy in 10 minutes.

Tabulation

Plan and type from handwritten copy a table of four columns (6 to 10 letter characters per line), 10 lines per column, in 10 minutes.

Manuscripts--Reports

Produce double-space, corrected or error free, report copy of approximately 300 words from corrected or handwritten drafts in 13 minutes.

Level 3--Timed Writing

Crip wobbled when he walked, and most people who didn't know him thought he was drunk. But he never drank. It was just that he had weak legs. From the waist up there wasn't a stronger man in all Rutherford County. 14 29 42

Crip worked for Mr. Green Sawyer at the Railway Express Company, loading and unloading the express wagon that met all the trains. When he spread his legs apart and put a heavy crate on his shoulders you wouldn't know there was anything wrong with him. The weight seemed to steady him. 55 70 84 99

I don't remember when Crip started working for the Express Company, but I do remember when he had to quit. It was in the late 20's that Mr. Sawyer decided he had to move along with the times, so he got rid of the horse and wagon and bought a truck. Crip, of course, had never learned to drive. 113 128 143 157

People still used a lot of coal fires in those days, and Crip decided to go into business for himself--hauling kindling wood. Mr. Sawyer helped him get started by giving him a jennet and second-hand spring wagon. 171 186 199

Crip named the jennet Mr. Sawyer. On one side of the wagon he painted "Crip's Kindling, Wagon No. 1." On the other side he painted "Crip's Kindling, Wagon No. 2." Crip said that made it look like he had a fleet. 213 227 242

Business was good. Then one night the shed where Crip kept the jennet and wagon burned up. He managed to get the wagon out, but the jennet wouldn't move. Mr. Crip got a new jennet, though, and named him Mr. Sawyer No. 2. 256 270 285 286

Level 3--Letters

Directions: Type the following letter, making one carbon and addressing an envelope. You may use any acceptable letter style, with appropriate punctuation scyle. Assume that (1) you are using plain bond paper, and (2) the envelope is plain, requiring the typing of both the return address and address. (10 minutes)

Central High School, Oliver, TN 37024, (Current Date)
Brookfield Motors, 2012 South Bend Avenue,
Knoxville, TN 37916. Attention Mr. L. S. Jones
Gentlemen Central High School will conduct
its annual "Career Day" program on Friday,
April 12. Would you help us again this year?
(D) Last year your company provided us with
one of your top mechanics to speak on his
career. If you will remember, his program was
rated second only to a NASA Astronaut,
who just happened to be passing through Oliver
on his way to Houston. This year we do not
have an astronaut; therefore, we feel sure
your mechanic will be the most popular guest
on our program. (D) Could you also send an
automobile salesman this year? Our Business
Club would like to have someone from the
Sales Department. (D) We will appreciate your
help very much. A copy of the 1973 program is
enclosed to give you an example of a typical
"Career Day" program. Yours truly Teresa Giles,
Student Body President, (your initials)
Enclosure

Level 3--Tabulation

Directions: Center horizontally and vertically on a full sheet of paper the following problem. Erase and correct all typing errors. Use double spacing. Hand in when completed. (10 minutes)

COMMON WORD LIST

overstock	direction	pamphlet	divide
social	profit	manual	involve
holiday	fulfill	neutral	compare
estimate	compose	window	clipping
workload	elective	military	ultimate
question	argument	kindliness	totally
surprise	typewriter	largest	gratitude
opposite	modern	shoulder	journey
complete	volume	report	between
youthful	country	internal	little

Level 3--Manuscript

Directions: (1) Type the following article in manuscript form, using a 60-space line (Pica) or a 70-space line (Elite)

(2) Leave a top margin of 1 1/2" on first page; 1" on other pages

(3) Leave a bottom margin of 1"

(4) Correct all errors

(5) (10 minutes)

The Cup

As I am writing this there are men from all parts of the world who are flying throughthe air in france for the cup which typifies the highest round of the ladder in the art of aviation, and under conditions which make it almost certain that accidents will happen whichwill lead to the loss of life or limb. At the first glance one is tempted to ask why they are doing it and if the game is well worth the candle. Were the winning of the cup the sole object in view the answer would be that it is not, but suchis not the case; the prize in itself is not and can never be equal in value to a single human life, but it is the thing that the cup stands for which really counts. The time is at hand when man will conquer the air as he had already conquered the land and the sea, and every contest like the presentonly serves to bring the victory one

step nearer, and the worth of but a single step in the progress of the world is something too vast to be set down in figures or even to be counted in human lives. ¶ It not seldom happens, too, that such a step is really a leap in the dark, and the taking of it may lead to fields so broad in extent that one could not imagine them it exist before the step was taken and the curtain of the future thrown aside. The winning of a prize as small as a grain of mustard seed may lead to rewards so great that their weight will ~~shake~~ the very foundations of the globe.

add side-heading
Leap in the Dark

Level 3--Timed Writing (Alternate Item)

We do not know which of the many roads to decay Crete chose; perhaps 14
she took them all. Her once great fields of cypress and cedar vanished; 28
today two-thirds of the land are a stony waste, incapable of holding the 43
cold rains. Perhaps there too, as in most faining cultures, control of the 58
number of people went too far, and the birth rate left to the failures. 72
Perhaps, as wealth and luxury increased, the pursuit of the pleasures 86
sapped the will of the race, and slowed its will to live or to defend 100
itself; a nation is born stoic and dies epicurean. Maybe the fall of Egypt 115
after the death of its king upset Creto-Egyptian trade and took away the 129
wealth required trade, and markets for her industries; like modern England 144
she was very dependent on the control of the seas. Perhaps war among her 159
own destroyed the land's manhood, and left it unprepared for a war. Perhaps 174
an earthquake shook great buildings into ruins, or a big war within avenged 189
in a year of terror all the weight of the many years. 200

And yet the signs of Egyptian culture in Crete are in every age. The 214
two cultures are at first so much alike that some think a wave of Egyptian 229
people to Crete must have occurred. Let us think that in its racial birth 244
the Cretan culture was of Asia, in many of its arts Egyptian; in essence 258
and total it was one of a kind. 264

Level 3--Letters (Alternate Item)

Directions: Type the following letter, making one carbon and addressing an envelope. You may use any acceptable letter style, with appropriate punctuation style. Assume that (1) you are using plain bond paper, and (2) the envelope is plain, requiring the typing of both the return address and address. (10 minutes)

2012 South Bend Avenue, Knoxville, TN 37916
(Current Date) Miss Teresa Stiles, Central High School, Oliver, TN 37024. Dear Miss Stiles Thank you very much for your letter and for requesting Mr. Johns to address the graduates at Central High on "Careers Day." He will be happy to; and Mr. Johns asked me to tell you he is looking forward to returning as one of your speakers. (P) Our leading new car salesman for six months consecutively is Mr. A. J. Shaker, who is a graduate of Central High (graduated in 1965). He will be your guest, along with Mr. Johns. The application with both names of these gentlemen is enclosed. (P) I was the operational officer on our first atomic submarine, the Nautilus. It is a wonderful career for a special kind of sailor. Maybe the graduating male students would like to hear more. If so, you may consider me for a guest next year. (P) Congratulations to Central graduates. Cordially yours BROOKFIELD MOTORS President (your initials)

Level 3--Tabulation (Alternate Item)

Directions: Center horizontally and vertically on a full sheet of paper the following problem. Erase and correct all typing errors. Use double spacing. Hand in when completed. (10 minutes)

POPULAR WORDS

adequate	banner	capture	difficult
example	finance	granted	handful
insistent	judgment	knowledge	landlord
musical	nevertheless	outright	paramount
qualify	reviewed	sincere	supersede
tabulation	understood	vocation	wonderful
yourselves	zealous	yellow	leadership
itemized	hazardous	possessive	glossary
flattered	encourage	creative	benefactor
assurance	classify	harmful	overturn

Level 3--Manuscript (Alternate Item)

Directions: (1) Type the following article in manuscript form, using a 60-space line (Pica) or a 70-space line (Elite)

(2) Leave a top margin of 1 1/2" on first page; 1" on other pages

(3) Leave a bottom margin of 1"

(4) Correct all errors

(5) (10 minutes)

Faith in Thyself

A few years ago man wrote a book. He had never written none before, so far as I know, but he believed that he had a story to tell--it was locked up in his brain and he wanted to get rid of it--so he wrote it out and sent it to a publisher and sat down to await the result. He did not have to wait very long for his copy came back without loss of time and with it the usual printed form with thanks to the author for sending and an apology for not using the matter. But the man had faith in himself--something we all must have if we hope to win--and he also had faith in the work he had done. He knoew the story of bruce and the spider and was willing to try again and to keep ontrying to the end of the chapter if need by. So he kept that copy on its travels hoping to find somebody who would print it, and at last he did. At length the book was

Add side heading A Spark of Genius

printed and copies sent to the critics, as is the custom, and these later decided, honestly enough, that there was not much to praise in the story, as a story and that what there was in the way of a plot in it was weak and crudely put together, but--and in that "but" they showed their right to be called critics--that they saw in the book a spark of genius which might be fanned into quite a blaze in the end. A short time afterward the author died and before it had become known that he had won one of the big prizes in literature.

MINIMUM PERFORMANCE STANDARDS FOR LEVEL IV

Timed Writings

Type straight printed or handwritten copy of average difficulty for 5 minutes at a speed of 40 words per minute with no more than 2 errors.

Letters

Produce a mailable business letter of average length (no special lines), with one carbon copy and an addressed envelope from handwritten copy in 10 minutes.

Tabulation

Plan and type from handwritten copy a table of four columns (6 to 10 letter characters per line), 10 lines per column, in 10 minutes.

Type numbers in tabular or context form at a rate of 100 figures per minute for 3 minutes with no errors.

Manuscripts--Reports

Produce double-spaced, corrected or error free, report copy of approximately 300 words from corrected or handwritten draft in 13 minutes.

Level 4--Timed Writing

It seems the police have fallen into a way of thinking that is common 14
in a modern industrial society: If a job can't be done by a machine, it 28
can't be done. 31

This may be a good principle in farming, construction work, and other 45
such jobs. But good police work still means pounding the streets looking 60
for witnesses, asking the right questions, and a good supply of what some 74
like to call the "work ethic." 80

No doubt there are still many policemen who have a desire for 92
work. But it seems too many like to ride around in their cars looking 106
for the obvious instead of undertaking the serious digging necessary to 120
turn up hard clues. 124

No doubt this has added to the growing fight between the courts and 138
the police over the number of convictions obtained in court. 150

The land's courts and laws still require that people get on the 162
stand and testify to their knowledge of a crime. It is little wonder that 177
so many cases which have been prepared on the basis of lie tests and 191
electronic surveillance--without hard facts--are found wanting in the courts. 206

The quality of law enforcement is not likely to improve until the 220
nation's police forces are staffed with more dedicated officers who want 235
to work and the citizenry shows a desire to pay good men enough for the 249
work they are expected to do. 255

The people should be willing to pay the price for good law enforcement; 269
the man who wants to be a policeman must really want to be one. 282

Level 4--letters

Directions: Use any acceptable letter style, with appropriate punctuation style. Type an envelope and carbon copy. Put dates and times (paragraph 2) in tabular form. These instructions are incomplete--certain decisions for typing this letter appropriately are left to you. (10 minutes)

Dean Raymond L. Smithson, School of Business, City University, Nashville, TN 37204 Dear Dean Smithson Subject: Communications Consultants Your university has been recommended as one that can provide us with a special service. A group of 150 management trainees are arriving in Nashville for a one week seminar on plant procedures. The seminar will last from August 1 through August 7. A copy of the program is included. (P) Would your school provide us with communications consultants to talk with our trainees on the following dates and times? August 2, 8-10; August 3, 10-12; August 4, 8-10; August 5, 10-12. We are in a position to pay $50 for each two-hour session. In addition, our company would like to send a check for $300 to be used in school programs and projects. (P) Do you think you would be interested in providing this service to our company? May we hear from you soon? Yours truly Allan L. Logan, District Manager (your initials)

Level 4--Tabulation

Directions: Use a full sheet of paper for typing the following problem in acceptable form. Erase and correct all typing errors. Use double spacing. Hand in when completed. (10 minutes)

VOE CONFERENCES
(1974)

State	City	Region	Date
Alabama	Groton	23A	January 4
Kentucky	Trenton	46B	January 11
Georgia	Atlanta	11D	February 8
Tennessee	Jackson	33G	February 15
Tennessee	Nashville	21F	March 1
Tennessee	Knoxville	13E	March 8
Tennessee	Memphis	49M	March 15
Alabama	Huntsville	5H	April 5
Georgia	Athens	27L	April 12
Tennessee	Knoxville	12R	April 19

Level 4--Manuscript

Directions: (1) Assume that the manuscript is to be bound on the left side of paper

(2) Leave a top margin of 1 1/2" on first page; 1" on other pages

(3) Leave a bottom margin of 1"

(4) Type footnotes at the bottom of each page

(5) (10 minutes)

Vocational Subjects Offered in High Schools by Patty Glover Campbell

An official with the United States Department of Education states that one way the magnitude of the job vocational educators are facing can be comprehended is by examining the great number of potential young people for whom Federal assistance programs are planned. He believes that since only 20 percent of high school students will actually complete a four-year college program, the remainder, about 10.4 million students (in 1965), could benefit from vocational education. This number can be expected to be around 13.6 million by 1985.[1] (P) James B. Conant, in The American High School Today, states that vocational education, an integral part of the whole program of education, requires aptitude not possessed by students at the lowest academic level.[2] (P) A noted business educator, Elvin S. Eyster, says that there is a tendency for career preparation for technical positions in business to move out and up from the high school, and out and down from colleges and universities. He feels that junior colleges, community colleges, business colleges, and colleges that offer one- and two-year business programs will increasingly train students in high-level technical business courses.[3]

[1]Calfrey C. Calhoun, "Vocational, Technical, and Adult Education Research for 1967," Journal of Business Education, XLII (February, 1967), 218.

[2]James Bryant Conant, The American High School Today (New York: McGraw-Hill Book Company, Inc., 1959), p. 123.

[3]Elvin S. Eyster, "Education for Business and Office Careers," American Vocational Journal, IV (September, 1965), 20.

Level 4--Typing Numbers in Context

Directions: (1) Do not start--Your teacher will signal to start

(2) Space down 16 single spaces from top of the paper

(3) Set left margin at 13 for Pica, 22 for Elite

(4) Set tab stops--Pica: 32, 47, 66
Elite: 41, 56, 75

(5) Do not erase--if you make an error, start over on new sheet

(6) (3 minutes)

extension	92.62	allow	29.83
fund	57.84	forwarded	95.61
satisfied	63.15	history	57.32
front	46.89	referred	49.67
begin	81.86	semester	19.53
attaching	13.49	chest	97.18
advising	79.47	court	12.84
heard	26.78	pleasant	58.66
traffic	43.21	relative	64.35
purchaser	68.32	single	92.85
finest	17.34	salesmen	64.35
session	70.86	finish	27.93
whose	48.16	arrange	32.24
allowance	96.03	cooperate	27.45
interests	79.35	armed	23.40
cause	68.97	consumer	59.78

Level 4--Timed Writings (Alternate Item)

In every great crisis of violence or corruption in our great land, 13
man tends either to turn away from it in cynicism or blame it on the 27
moral decline of the land as a whole. It is an old habit in our land: 41
We either forget or bleed. 46

Still, at the start of a new school year, when even Washington is 59
just getting the first sweep of cool clear autumn air, one asks if we 73
could not have a lot more honest discussion in our land on how all these 87
strange things happened, and what, if anything, they mean in our values 102
and ideas. 104

This was the big question. And the main question was why so many 117
people felt isolated, pointless, and even helpless, and whether it was 131
possible or useful to plan ways of talking, not only about legislation to 145
avoid violence and corruption, but about the morals and values, and the 160
philosophical underpinnings of the whole thing. 169

The sad thing is that all this sincere and careful study of our 182
problems does not seem to lead anywhere. The people are left with the 196
politicians and the reporters and the editorial writers and the thoughtful 211
people at foundation meetings who do the best they can but in the end do 225
not really answer the questions they raise. 234

While the American people today do not believe in the old ways, and 247
are confused by all this vague debate, they believe in believing in the 261
old values and yearn for some better way to escape from the isolation and 276
importence that troubles their lives. 283

Level 4--Letters (Alternate Item)

Directions: Use any acceptable letter style, with appropriate punctuation style. Type an envelope and carbon copy. Put dates and names (paragraph 2) in tabular form. These instructions are incomplete--certain decisions for typing this letter appropriately are left to you. (10 minutes)

Mr. Allan L. Logan, President, Atlantis Electronic Corporation, Memphis, TN 37335 Dear Mr. Logan, Subject: Management Trainee Seminar, We thank you very much for requesting our help in providing your firm with management consultants for your seminar. (P) Two of our professors can be available on August 2-5 to speak to your trainees. Professors Tom Hawes and Ed Jones are highly trained for this assignment. Both men have management experience in industry, as well as educational training in industrial management. Their schedule permits the following plan: August 2, Hawes; August 3, Jones; August 4, Hawes; August 5, Jones. Is this schedule all right with you? (P) I have informed Professor Hawes and Professor Jones that your firm will pay $100 to each of them for conducting the seminars. They will contact you within the next week. (P) Thank you for inviting our university to participate in your management seminar. We hope you will call on us again. Sincerely yours, Raymond L. Smithson, Dean (your initials)

Level 4--Tabulation (Alternate Item)

Directions: Use a full sheet of paper for typing the following problem in acceptable form. Erase and correct all typing errors. Use double spacing. Leave 6 spaces between columns. Hand in when completed. (10 minutes)

AREA SCHOOL CONFERENCES
(1974)

State	City	Region	Date
Florida	Daytona	5D	March 1
Georgia	Athens	50E	March 8
California	San Diego	51C	April 5
Tennessee	Nashville	21F	April 12
North Dakota	Bismark	46H	March 15
Oregon	Portland	40J	March 22
Nevada	Las Vegas	37R	April 19
Vermont	Concord	27K	April 26
New York	Albany	28T	March 29
Kentucky	Frankfort	19S	March 12

Level 4--Manuscript (Alternate Item)

Directions: (1) Assume that the manuscript is to be bound on the left side of paper

(2) Leave a top margin of 1 1/2" on first page; 1" on other pages

(3) Leave a bottom margin of 1"

(4) Type footnotes at the bottom of the pages

(5) (10 minutes)

Vocational Subjects Offered in High Schools by Patty Glover Campbell

Office education, a type of vocational education, enrolls more high school students than all other types of vocational education combined. The preparation of stenographers, typists, and clerical workers is vocational education. The largest percentage of students who are preparing for office work is to be found in high schools. The United States Department of Labor has estimated that by 1970, 12.8 million Americans will be working in this occupation group.[1] (P) Edward A. Krug, in The Secondary School Curriculum, states that an important part of human achievement in skill and knowledge is transmitted by the business field. This field is important in intellectual content and is indispensable in human affairs. The place of business education in vocational preparation, he feels, is assured.[2] (P) Today's culture, with its increased demands on young people, has produced a large number of teenagers who do not keep pace with the regular school program. Some schools are apparently trying to offer the traditional courses and the newer courses as well. As nearly 50 percent of the student body may end up as dropouts, the mass production program of education may not be reaching all students. Therefore, some educators apparently feel that public education should try to develop and offer programs to meet the needs of all youth.[3]

[1]Bernard A. Shilt, "Office Education, A Partner in Vocational Education," American Vocational Journal, XL (March, 1965), 21.

[2]Edward A. Krug, The Secondary School Curriculum (New York: Harper and Brothers, 1960), p. 467.

[3]Eugene P. Whitney, "A Program for Students with Special Needs," The Journal of Business Education, XLIII (October, 1967), 6.

Level 4--Typing Numbers in Context (Alternate Item)

Directions: (1) Do not start--Your teacher will signal to start

(2) Space down 16 single spaces from top of the paper

(3) Set left margin at 13 for Pica, 22 for Elite

(4) Set tab stops--Pica: 32, 47, 66
Elite: 41, 56, 75

(5) Do not erase--if you make an error, start over on new sheet

(6) (3 minutes)

marketing	23.75	hands	49.96
face	39.82	professor	56.31
submitted	65.91	maximum	31.48
error	74.96	provides	26.29
hotel	47.19	actually	35.86
concerned	59.62	phone	21.47
selected	17.98	prove	49.53
refer	32.49	whatever	86.27
checked	68.31	accident	14.73
inventory	49.56	inform	52.89
permit	32.75	presented	64.58
privilege	54.36	sorry	37.92
seeing	68.41	American	91.03
medical	53.87	toward	67.24
funds	24.06	process	79.86
specified	78.95	warehouse	20.34

III

STATISTICAL ANALYSIS OF TESTS

Criteria for Scoring

Related literature and research was reviewed in order to establish criteria for scoring the performance tests. Several research studies and, in particular, a book by West (21) were used in the establishment of the scoring criteria. Furthermore, analyses were made of secondary school and college textbooks and manuals in typewriting; secretarial handbooks; curriculum guides; various typewriting tests (including commercially published tests), tests prepared by business education departments of selected colleges and universities, and certified professional tests. This data aided in identifying and classifying errors.

Errors were classified as (1) major errors, (2) intermediate errors, and (3) minor errors. Major errors were defined as errors that would require the complete retyping of the test item; intermediate errors were defined as errors that could be corrected without retyping the item; and minor errors were defined as errors in which the typist would not be required to correct or retype the item. Secondary school teachers and college professors evaluated the various errors identified in an outline.

Errors identified were also presented to these professional people in order to determine the weight that would be given to a specific error. Disagreement resulted among evaluators about the weight that should be assigned to a particular error. For

example, the weight of a "strike over" error according to some evaluators, was considered a major error. Other evaluators, however, felt that such errors were intermediate errors because such errors could be corrected without the necessity of retyping the item. Some evaluators prefer to consider certain errors as major errors while the typist is still in the learning stage in order to eliminate such error-making before the typist is employed. The errors presented in Table I were counted as uncorrectable, correctable, or minor. This policy relates to the office situation since one of the purposes of the vocational office education programs is to simulate the real office in the classroom.

Numerical values were assigned to the weight classifications as follows: (1) major errors, 3 points, (2) intermediate errors, 2 points, and (3) minor errors, 1 point. The decision to assign these weights was based on several weighting systems suggested by West (21), whose recommendations were based on extensive research. Scores on the performance tests represent the number of points subtracted for errors as opposed to the usual system of subtracting points from a maximum score.

Teachers may wish to adopt the same grading plan as used in the research for developing these tests. It must be pointed out that because the tests had to provide statistically significant differences between the results for the various levels, the resulting scores do not necessarily relate to the State Guide standards. For example, the guide does not quantify the maximum number of errors permissible for a letter.

Rather, it states that the letter must be "mailable." For measuring purposes, of course, such standards had to be quantified. Thus, the scores were based upon the total errors within a test item. The point value of each type of error is presented in Table I, and the statistical results using these point values are presented in Table VI.

A Recommended Scoring Plan

A variation which would more closely correlate to the curriculum guide would be to adopt the grading plan to the total test item rather than individual errors within test items. Using this scoring plan, a test item (such as a letter) could be given a total of 3 points if it is mailable, 2 points if there are errors that can be corrected, and 1 point should there be an error in the item that is uncorrectable.

For example, if a test item such as a letter, table, or manuscript contains an error which is uncorrectable, that test item would receive a score of 1. One or more correctable errors in a test item would result in a score of 2 points for that item. And of course, an item containing only minor errors (as shown in Table I) would be given a value of 3 points. Thus, at semester's end, a student who has an average score of 2.0 or greater would meet the Curriculum Guide standards for error.

TABLE I

CRITERIA FOR SCORING LETTERS, MANUSCRIPTS, AND TABLES

	Points
Letters	
Incorrect typing of letter style or punctuation style	3
Incorrect typing of letter parts--style, placement, omission, spacing	3
Omission of carbon copy	50
Typing carbon copy on back of original	3
Failure to correct carbon copy, resulting in serious error	3
Score carbon copy same as original plus major errors	3
Omission of envelope	25
Poor placement of address on envelope horizontally/vertically (exceeding 6 spaces)	3
Manuscript	
Incorrect typing of heading/subheading--centering, placement, spacing	3
Incorrect typing of footnote--placement, content, spacing	
Insignificant	1
Correctable	2
Uncorrectable	3
Tabulation	
Incorrect typing of table parts--centering, capitalization, spacing	3
Incorrect spacing between columns--exceeding two spaces	3
Typing in space between columns	3
Examples of Typographical Errors (Letter, Manuscript, Table)	
Failure to follow instruction--margins, spacing	3
Misspelled word	2
Failure to capitalize	2
Incorrect capitalization	2
Strike-over	2
Raised letter	2
Failure to single space or double space problem	3
Transposition of words	2
Extra space between words	1
Space within word	2

TABLE I (continued)

	Points
Failure to space between words	2
Typing same word twice	3
Omission of word	1
Incorrect spacing after punctuation	1
Abbreviated dates	1
Uneven typing of letter within word	2
Uneven touch	
Character visible	1
Character not visible	2
Omitted dash, hyphen	2
Incorrect word division	
Correctable	2
Uncorrectable	3
Dividing more than 3 words per page	3
Incomplete problem--per line	3
Typing same line twice--incomplete problem, per line	3
Omission of line--incomplete problem, per line	3
Error in interpretation of proofer's mark	
Correctable	2
Uncorrectable	3
Error resulting from machine malfunction	0
Erasure	
Detectable in proofreading	5
Improvable	2
Uncorrectable, must retype	3
Typing in space between columns, lines, margins	
Neatly erased	2
Poorly erased	3
Examples of Typographical Errors (Timed Writing)	
Misspelled word	1
Failure to capitalize	1
Incorrect capitalization	1
Strike-over	1
Raised letter--not completely visible	1
Transposition of words	1

TABLE I (continued)

	Points
Omission of word	1
Omission of line--do not count line in total words	1
Typing same word twice	1
Typing same line twice--do not count line in total words	1
Extra space between words	1
Failure to space between words	1
Space within word	1
Uneven left margin--do not count off	0
Omitted hyphen, dash	1
Light characters (not visible)	1
Incorrect spacing after punctuation marks	1
Incorrect word division	1
Failure to double space--partially or completely	0
Error resulting from machine malfunction	0

Comparison of Each Test Level With Its Alternate

According to Ferguson (7), in comparing equivalent tests, some criteria of parallelism is required. Test content, test items, instructions for giving tests should be similar. "The parallel forms should have approximately equal means and standard deviations." The t test provided both comparability of parallelism by considering both the means and standard deviations and also answering the question as to whether the tests differed between performance levels. This second consideration, difference by performance levels, is discussed in the next section.

Table II presents the means and Table III shows the comparisons of the mean scores of the alternate test forms for each of the four performance levels. The mean scores of the two similar test forms for Level 1 tests were compared by Timed Writing speed scores, by the number of Errors made on the timed writing, by Letter scores, by Tabulation scores, and by Manuscript scores. This same procedure was followed for Level 2, Level 3, and Level 4 tests. A comparison of the mean scores throughout the four test levels resulted in no significant differences between similar test items at the 10 percent level. The criterion established for similarity of test items on alternate forms was, therefore, met with all test items.

TABLE II

MEAN SCORES BY LEVEL AND FORM

Level	Form	Timed Writing	Errors	Letters*	Tabulation*	Manuscript*
I	a	30.47	8.62	10.67	4.33	
	b	30.73	8.50	11.66	4.79	
II	a	33.97	8.90	32.64	11.53	28.53
	b	34.67	9.67	29.70	11.51	30.28
III	a	43.90	9.32	41.13	9.82	31.52
	b	45.40	9.34	45.37	11.81	36.95
IV	a	53.14	10.38	47.36	16.25	52.94
	b	43.33	10.69	49.95	18.79	55.42

* These scores represent the average number of errors per item as weighted by points as described in Table I. This table should not be used to compare the results from level to level as these values do not represent how a given student would perform at a different level.

Source: Ivey Chance. "The Development of Typewriting Tests for Measuring Student Achievement at Various Performance Levels." Unpublished doctoral dissertation, The University of Tennessee, Knoxville.

TABLE III

COMPARISON OF MEANS OF ALTERNATE FORMS[a]

Level and Form	Test Items[b]				
	TW	E	L	T	M
1a-1b	.04	.06	.33	.31	-
2a-2b	.17	.59	.67	.01	.40
3a-3b	.36	.02	.83	1.33	1.34
4a-4b	.03	.22	.39	.94	.36

[a]t values--t value must be 1.64 for significance of .10 level.

[b]TW, Timed Writing; E, Errors; L, Letters; T, Tabulation; M, Manuscript.

Source: Ivey Chance. "The Development of Typewriting Tests for Measuring Student Achievement at Various Performance Levels." Unpublished doctoral dissertation, The University of Tennessee, Knoxville.

Comparison of Each Test Form With the Next Higher Level

Table IV shows the comparison of mean scores of the various test items, by levels. The purpose of such a comparison was to determine if the items in the two performance tests were discriminating between test levels. Students taking Level 1 tests were also administered Level 2 tests; and students taking Level 1 alternate tests were also administered Level 2 alternate tests. This procedure was followed with the other levels of tests.

An analysis of the data in Table IV shows that no significant differences were found in the comparison of mean scores of the Timed Writing speed scores or for the Error scores at any of the four test levels. The comparison of the mean scores, however, by level for Letter scores, Tabulation scores, and Manuscript scores yielded significant differences throughout the four test levels. The criterion was not met, therefore, for Timed Writing and Errors; however, the criterion was met for Letters, Tabulation, and Manuscript.

The only measured variable from level to level on the straight-copy tests was syllabic intensity. As can be seen in Table V, syllabic intensity was progressively higher as the test level increased. Intuitively, it would seem that the measures of straight-copy typing--speed and error rate--must be more of a function of the student's level of technique development and perhaps vocabulary than of syllable intensity.

TABLE IV

COMPARISON OF MEANS BY LEVELS[a]

Form and Level	Test Items[b]				
	TW	E	L	T	M
Form					
1a-2a	.11	1.01	4.03[c]	5.80[c]	-
1b-2b	.02	.80	4.31[c]	5.67[c]	-
2a-3a	.58	1.34	4.32[c]	4.87[c]	3.87[c]
2b-3b	.40	.70	4.82[c]	6.14[c]	4.38[c]
[d]3a-4a	.39	.77	3.50[c]	6.01[c]	5.20[c]
3b-4b	.21	1.22	2.65[c]	5.81[c]	4.31[c]
[d]3a-4a	.40	.90	4.36[c]	4.15[c]	4.86[c]
3b-4b	.23	1.53	3.08[c]	5.26[c]	4.67[c]

[a]t values

[b]TW, Timed Writing; E, Errors; L, Letters; T, Tabulation; M, Manuscript.

[c]Significant at the 5 percent level.

[d]Semester 4 and VOE tested separately.

Source: Ivey Chance. "The Development of Typewriting Tests for Measuring Student Achievement at Various Performance Levels." Unpublished doctoral dissertation, The University of Tennessee, Knoxville.

As can be seen from the test items, there were many variables from level to level for the letter, tabulation and manuscript tasks. Complexity was added to the directions which were to be followed as well as the actual tasks to be accomplished.

TABLE V

SYLLABIC INTENSITY BY LEVEL

LEVEL	S I RANGE
1	1.00-1.15
2	1.15-1.25
3	1.25-1.35
4	1.35-1.45

Percentage and Cumulative Percentage Scores

Table VI shows the percentage and cumulative percentage scores for the six categories of the performance test. Where possible, the variable being measured (words per minute, errors, etc.) is divided into increments which will correspond to the thresholds as presented in the state curriculum guide. For example, the cumulative percentage figure for the 21-25 increment of Timed Writings using form 1a was 26.270. Twenty-five words per minute is the minimum threshold for Level 1 students and 26.2 percent failed to meet this standard. Obviously, 73.4 percent did meet the standard. Using form 2a, 80.4 percent of the students failed to meet the forty-word-per-minute standard whereas, as could be expected, only 10,8 percent were unsuccessful on form 4a.

The results of the Errors test were dismal and may hold implications for the manner in which typewriting is taught. Using form 1a, only 18.3 percent of the Level 1 students could meet the state curriculum guide criteria of three errors or less. As the level is increased, moreover, the percentage passing the standard decreased. Only 7 percent of those taking form 4a passed the state curriculum guide standard of two errors or less.

The Letters, Tabulation, and Manuscript categories were graded in accordance with the scoring scheme described earlier. The results of the Number Typing tests were not compiled as a part of the original research underlying this report. The Number Typing portion of the test was performed by the Level 4 students, however, and the resulting data is included in Table VI for your information.

VI

PERCENTAGE AND CUMULATIVE PERCENTAGE SCORES

Timed Writings

WPM	1a (60) %	1a (60) Cum %	1b (62) %	1b (62) Cum %	2a (152) %	2a (152) Cum %	2b (152) %	2b (152) Cum %	3a (249) %	3a (249) Cum %	3b (240) %	3b (240) Cum %	4a (157) %	4a (157) Cum %	4b (150) %	4b (150) Cum %
0-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6-10	1.7	1.7	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11-15	3.3	5.0	4.8	4.8	0.7	1.4	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-20	3.3	8.3	4.8	9.6	5.3	6.7	5.9	7.2	2.0	2.0	0.8	0.8	0.0	0.0	0.7	0.7
21-25	18.3	26.6	24.2	33.8	13.2	19.9	10.5	17.7	2.8	4.8	5.4	6.2	1.9	1.9	0.7	1.4
26-30	21.7	48.3	19.4	53.2	13.8	33.7	14.5	32.2	9.6	14.4	5.8	12.0	2.5	4.4	1.3	2.7
31-35	25.0	73.3	22.6	75.8	25.0	58.7	21.7	53.9	10.8	25.2	14.6	26.6	1.3	5.7	3.3	6.0
36-40	16.7	90.0	8.1	83.9	21.7	80.4	17.1	71.0	16.1	41.3	10.4	37.0	5.1	10.8	5.3	11.3
41-45	6.7	96.7	4.8	88.7	11.8	92.2	17.8	88.8	15.3	56.6	11.3	48.3	13.4	24.2	12.0	23.3
46-50	3.3	100.0	6.5	95.2	3.3	95.5	6.6	95.4	14.9	71.5	17.1	65.4	12.7	36.9	12.0	35.3
51-55	0.0	100.0	4.8	100.0	3.3	98.8	3.9	99.3	8.4	79.9	12.9	78.3	15.9	52.8	20.7	56.0
56-60	0.0	100.0	0.0	100.0	0.0	98.8	0.7	100.0	10.8	90.7	8.8	87.1	21.0	73.8	18.7	74.7
61-65	0.0	100.0	0.0	100.0	1.3	100.1	0.0	100.0	6.0	96.7	7.1	94.2	14.6	88.4	11.3	86.0
66-70	0.0	100.0	0.0	100.0	0.0	100.1	0.0	100.0	2.0	98.7	3.8	98.0	5.7	94.1	6.7	92.7
71-75	0.0	100.0	0.0	100.0	0.0	100.1	0.0	100.0	0.0	98.7	1.3	99.3	5.1	99.2	6.7	99.4
76-80	0.0	100.0	0.0	100.0	0.0	100.1	0.0	100.0	0.8	99.5	0.8	100.1	0.6	99.8	0.7	100.1
81-85	0.0	100.0	0.0	100.0	0.0	100.1	0.0	100.0	0.4	99.9	0.0	100.1	0.0	99.8	0.0	100.1

Errors

Number of Errors	1a %	1a Cum %	1b %	1b Cum %	2a %	2a Cum %	2b %	2b Cum %	3a %	3a Cum %	3b %	3b Cum %	4a %	4a Cum %	4b %	4b Cum %
0-2	15.0	15.0	11.3	11.3	9.2	9.2	10.5	10.5	5.2	5.2	5.8	5.8	7.0	7.0	3.3	3.3
3	3.3	18.3	4.8	16.1	8.6	17.8	6.6	17.1	6.0	11.2	7.5	13.3	3.8	10.8	4.0	7.3
4-6	23.3	41.6	21.0	37.1	24.3	42.1	21.7	38.8	24.5	35.7	21.3	34.6	23.6	34.4	21.3	28.6
7-9	20.0	61.6	25.8	62.9	20.4	62.5	21.1	59.9	24.5	60.2	27.9	62.5	14.6	49.0	24.0	52.6
10-12	11.7	73.3	17.7	80.6	15.1	77.6	14.5	74.4	15.3	75.5	15.8	78.3	20.4	69.4	18.0	70.6
13-15	16.7	90.0	8.1	88.7	8.6	86.2	7.2	81.6	11.2	86.7	10.0	88.3	11.5	80.9	11.3	81.9
16-18	8.3	98.3	4.8	93.5	6.6	92.8	9.2	90.8	5.6	92.3	3.3	91.6	9.6	90.5	6.0	87.9
19+	1.7	100.0	6.5	100.0	7.2	100.0	9.2	100.0	7.6	99.9	8.3	99.9	9.6	100.1	12.0	99.9

TABLE VI (continued)

Letters

Score	1a N	1a %	1b N	1b %	2a N	2a %	2b N	2b %	3a N	3a %	3b N	3b %	4a N	4a %	4b N	4b %
0-9	40	67	34	55	25	16	24	15	65	26	37	15	15	9	12	8
10-19	11	18	15	24	28	19	32	21	24	10	30	13	18	12	19	13
20-29	2	3	8	13	20	13	27	18	26	11	26	11	10	6	10	7
30-39	4	7	5	8	25	16	25	16	33	13	35	14	23	15	26	18
40-49	1	2	--	--	22	14	19	13	16	6	21	9	22	14	18	12
50-59	2	3	--	--	12	8	13	9	17	7	20	8	16	10	17	11
60-69	--	--	--	--	10	7	6	4	16	6	8	3	12	8	5	3
70-79	--	--	--	--	5	3	2	1	12	5	19	8	17	11	8	5
80-89	--	--	--	--	3	2	2	1	11	4	16	7	12	8	14	9
90-99	--	--	--	--	1	1	1	1	8	3	6	3	6	4	8	5
100+	--	--	--	--	1	1	1	1	21	9	22	9	6	4	13	9

Tabulation

Score	1a N	1a %	1b N	1b %	2a N	2a %	2b N	2b %	3a N	3a %	3b N	3b %	4a N	4a %	4b N	4b %
0-4	40	67	31	50	60	39	55	35	91	37	85	35	20	13	16	10
5-9	13	22	20	32	33	22	40	26	69	28	50	21	44	29	30	20
10-14	4	7	8	13	21	14	18	12	32	13	35	15	32	21	30	20
15-19	2	3	2	3	14	9	17	11	21	8	26	11	21	14	22	15
20-24	--	--	--	--	3	2	3	2	11	4	12	5	10	6	14	9
25-29	1	1	1	2	5	3	3	2	11	4	9	4	9	5	7	5
30-34	--	--	--	--	5	3	1	1	5	2	3	1	5	3	9	6
35-39	--	--	--	--	1	1	4	3	4	2	5	2	2	1	3	2
40-44	--	--	--	--	--	--	--	--	3	1	3	1	2	1	4	3
45-50	--	--	--	--	--	--	1	1	1	(.5)	3	1	2	1	1	1
50+	--	--	--	--	10	7	10	7	1	(.5)	9	4	10	6	14	9

TABLE VI (continued)

Manuscript

Score	2a N	2a %	2b N	2b %	3a N	3a %	3b N	3b %	4a N	4a %	4b N	4b %
0-9	33	32	34	22	58	23	34	13	3	2	1	1
10-19	32	21	30	20	51	20	57	24	15	10	11	-
20-29	28	18	23	15	33	13	35	15	12	7	17	11
30-39	18	12	21	14	31	12	24	10	18	11	19	13
40-49	16	10	17	11	19	8	18	8	29	18	22	15
50-59	8	5	8	5	22	9	21	9	23	15	17	11
60-69	8	5	3	2	13	5	17	7	17	11	17	11
70-79	3	2	5	3	7	4	14	6	14	9	22	15
80-89	1	1	6	4	6	3	4	2	12	8	9	6
90-99	1	1	1	1	5	2	3	1	6	4	4	3
100+	4	3	4	3	4	1	13	5	8	5	11	7

Number Typing--Level 4

Percentile	N(278)	%
90-100	23	8.3
80-89	17	6.1
70-79	25	9.0
60-69	37	13.3
50-59	30	10.8
40-49	22	7.9
30-39	28	10.1
20-29	27	9.7
10-19	25	9.0
0-9	44	15.8

NOTES: The Number in parenthesis heading each column indicates the total number of tests given each level and form.
N = Number

Source: Ivey Chance. "The Development of Typewriting Tests for Measuring Student Achievement at Various Performance Levels." Unpublished doctoral dissertation, The University of Tennessee, Knoxville.

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